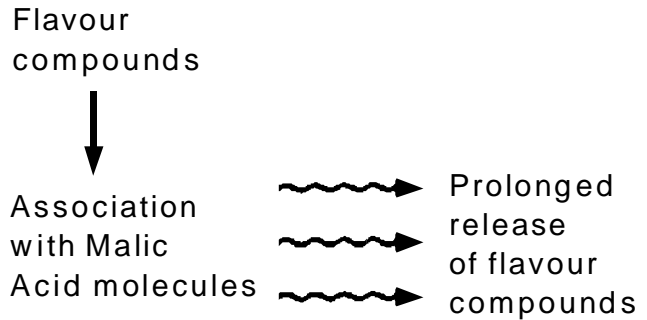


MALIC ACID: for candies with more fruit flavour and sourness

Bartek Malic Acid is used in confectionery products to enhance fruit flavour and to provide sourness.

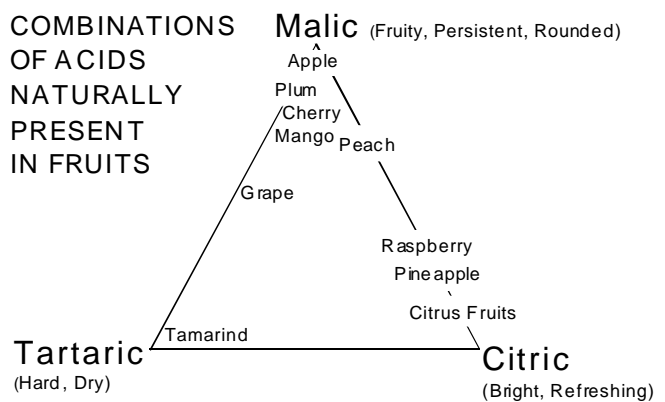
ENHANCED FRUIT FLAVOUR

Malic Acid enhances fruit flavours by prolonging their release. Olfactory receptor cells are stimulated by these fruit flavours over a longer period of time. This prolonged stimulation is interpreted by the brain as stronger fruit flavour.



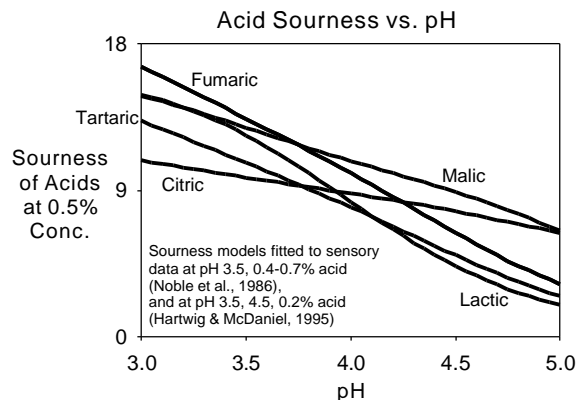
ESSENTIAL FOR A NATURAL FRUIT FLAVOUR PROFILE

Malic Acid is present in most fruits, usually in combination with Citric and Tartaric Acids, as shown in the diagram at right. Fruit flavours in fresh fruits are enhanced by the Malic Acid that is naturally present. Malic Acid is used in confectionery products to achieve a naturally balanced flavour profile.



MORE SOURNESS THAN OTHER ACIDS OVER A WIDE pH RANGE

Malic Acid provides more sourness than most other acids used in confectionery products, as shown in the graph at right. Sourness is related to the level of undissociated acid present and therefore varies with pH. Another factor involved is the persistence of sourness. In general, more hydrophobic acids such as Malic and Fumaric Acid have more persistent sourness.



Bartek Ingredients Inc. has manufactured high quality Malic and Fumaric Acids for the last 25 years in Ontario, Canada. Detailed, product-by-product recommendations are available through the Bartek Acidulant Audit.